

IN THE CLAIMS

1. (Currently amended) A data processing device, comprising a master controller, a first functional unit including a slave controller, a second functional unit, and a common memory means shared by the first and second functional units, the data processing device being programmed for executing an instruction by the first functional unit, execution of said instruction involving input/output operations by the first functional unit, wherein said execution involves at least one of: output data of the first functional unit being processed by the second functional unit in the midst of execution of said instruction, and the input data to the first functional unit being generated by the second functional unit ~~in the midst of~~ during execution of said instruction.
2. (Previously presented) The data processing device according to claim 1, wherein the first functional unit is arranged for processing instructions of a first type corresponding to operations having a relatively large latency and the second functional unit is arranged for processing instructions of a second type corresponding to operations having a relatively small latency.
3. (Previously presented) The data processing device according to claim 1, having halt means controllable by the master controller for suspending operation of the first functional unit.
4. (Currently amended) A method of operating a data processing device, comprising:
a master controller for controlling operation of the data processing device,

a first functional unit, which includes a slave controller, the first functional unit being arranged for executing instructions of a first type corresponding to operations having a relatively long latency,

a second functional unit capable of executing instructions of a second type corresponding to operations having a relatively short latency, wherein the first functional unit during execution of an instruction of the first type receives input data and provides output data, and said execution involves at least one of: output data of the first functional unit being processed by the second functional unit ~~in the midst of~~ during execution of said instruction, and input data to the first functional unit being generated by the second functional unit in the midst of execution of said instruction.

5. (Previously presented) The method according to claim 4, wherein the master controller temporarily suspends operation of the first functional unit during execution of instructions of the first type.
6. (Withdrawn)
7. (Withdrawn)

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